

**WHAT IS CLAIMED IS:**

1. A hinge module for mechanically connecting a main body to a folder in a portable radio terminal, comprising:
  - 5 a hinge shaft having an angled portion on one end and a shaft on another end opposite the angled portion for rotating with the folder;
    - a hinge cam facing the hinge shaft and having a pair of angled portions on the surface of the hinge cam facing the hinge shaft, a valley portion between the angled portions, a fixing post along a rotating axis, and a guide protrusion for
    - 10 facilitating sliding of the hinge cam with respect to the hinge shaft while restricting rotational movement of the hinge cam, each angled portion having a gentle slope and a steep slope that are asymmetrical sidewise;
    - a hinge spring disposed along the rotating axis and having one end connected to the fixing post of the hinge cam, for providing restoring force to the
    - 15 hinge cam; and
    - a hinge housing for sequentially holding the hinge shaft with one end of the hinge shaft protruded, the hinge cam, and the hinge spring.
2. The hinge module of claim 1, wherein when the folder is raised,
  - 20 the angled portion of the hinge shaft runs over the steep slopes of the angled portions of the hinge cam.
3. The hinge module of claim 1, further comprising a hinge cover coupled to the hinge housing for protecting the hinge shaft, the hinge cam, and
  - 25 the hinge spring.